

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	16064	spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:02
L2	30980	gap near2 length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 13:59
L3	695	1 and 2	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 13:59
L4	1830	gap near2 length with size	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 13:59
L5	21	1 and 4	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 13:59
L6	9	5 and maxim\$5	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:00
L7	671	spark adj gap and trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:03

## EAST Search History

L8	1	5 and 7	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:02
L9	85	spark adj gap with air and trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:03
L10	1637	spark adj gap with air	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:18
L11	4	10 and 4	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:13
L12	642	trace same circuit same thickness same length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:14
L13	151	trace with circuit same thickness with length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:16
L14	0	13 and 10	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:15
L15	1825	trace with circuit and thickness with length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:15

## EAST Search History

L16	0	15 and 10	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:16
L17	289	trace with circuit same thickness same length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:17
L18	1	17 and 10	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:16
L19	3510	trace with circuit same length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:17
L20	6	19 and 10	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:17
L21	16064	spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:24
L22	48	21 and 19	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:18
L23	766	spark adj gap near4 air	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:24

## EAST Search History

L24	3	23 and 19	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 14:24
L28	30319	yag with laser	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 16:00
L29	25109	yag adj laser	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 16:03
L30	13140	yag adj laser	USPAT	OR	ON	2006/05/20 16:01
L31	12	29 same circuit with trace	USPAT	OR	ON	2006/05/20 16:03
L32	30319	yag with laser	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/20 16:03
L33	14	32 same circuit with trace	USPAT	OR	ON	2006/05/20 16:04
L34	2	33 not 31	USPAT	OR	ON	2006/05/20 16:14
L35	142	voltage adj surge same spark adj gap	USPAT	OR	ON	2006/05/20 16:16
L36	108	voltage adj surge same spark adj gap and "361"/\$.ccls.	USPAT	OR	ON	2006/05/20 16:23
L37	0	(trace and circuit and air and gap and spark and length and width).clm.	US-PGPUB	OR	ON	2006/05/20 16:25
L38	1	(trace and circuit and air and gap and spark ). clm.	US-PGPUB	OR	ON	2006/05/20 16:25
S1	15851	spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:47

## EAST Search History

S2	436	trace same width with gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:39
S3	22477	air with gap same length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:42
S4	1	S1 and S2 and S3	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:41
S5	8	S1 and S2	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:41
S6	80532	gap with length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:42
S7	1545	S1 and S6	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:42
S8	1173	S1 and S6 and voltage	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:43
S9	746	S1 and S6 and voltage and spaced	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:43

## EAST Search History

S10	58	S1 and S6 and voltage and spaced and trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:46
S11	5	S1 and S6 and voltage and spaced and trace and printed with board	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:48
S12	1980	"361"/\$.ccls. and S1	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 13:47
S13	28	S12 and voltage and trace and printed with board	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:35
S14	6	spark adj gap same first near2 trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:40
S15	61	spark adj gap same trace same (space distance)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:51
S16	32	spark adj gap same trace same (parallel\$3)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 09:20
S17	1980	spark adj gap and "361"/\$.ccls.	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:52

## EAST Search History

S18	45	spark adj gap same printed near2 board and "361"/\$.ccls.	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 15:53
S19	230	arc same temperature same humidity same pressure	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:54
S20	22	arc same temperature same humidity same pressure same gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 16:54
S21	5	arc same temperature same humidity same pressure same gap near spark	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 17:02
S22	23	temperature same humidity same pressure same gap near spark	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 17:03
S23	272	spark adj gap same gap near length	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 09:20
S24	3	spark adj gap same gap near length same trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 09:21
S25	20	spark adj gap same gap near4 trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 09:29

## EAST Search History

S26	43	spark adj gap same gap with trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 09:29
S27	93	(breakover ) and spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:40
S28	45	(breakover ) same spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:41
S29	1880	(breakover breakdown) same spark adj gap	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:42
S30	245	(breakover breakdown) same spark adj gap same protection	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:43
S31	7	(breakover ) same spark adj gap same protection	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:44
S32	5	(breakover same breakdown) same spark adj gap same protection	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 17:45
S33	2	"6628498".pn.	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:07



# EAST Search History

S34	2	"20020024791"	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:07
S35	19	(US-20020024791-\$ or US-20020151200-\$ or US-20040042141-\$ or US-20040057186-\$ or US-20040141263-\$).did. or (US-4586104-\$ or US-5933307-\$ or US-5969924-\$ or US-6059983-\$ or US-6467414-\$ or US-6493198-\$ or US-6510058-\$ or US-6600642-\$ or US-6628498-\$ or US-6937454-\$ or US-4527215-\$ or US-5315472-\$).did. or (US-3321390-\$ or US-2666908-\$).did.	US-PGPUB ; USPAT; USOCR	OR	ON	2005/12/09 18:13
S36	36	(US-20020024791-\$ or US-20020151200-\$ or US-20040042141-\$ or US-20040057186-\$ or US-20040141263-\$).did. or (US-4586104-\$ or US-5933307-\$ or US-5969924-\$ or US-6059983-\$ or US-6467414-\$ or US-6493198-\$ or US-6510058-\$ or US-6600642-\$ or US-6628498-\$ or US-6937454-\$ or US-4527215-\$ or US-5315472-\$).did. or (US-3321390-\$ or US-2666908-\$).did.	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:13
S37	4	S36 and pressure and humidity	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:14
S38	4	S36 and humidity	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:14

## EAST Search History

S39	38	S27 and temperature	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:14
S40	4	S38 and temperature	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:15
S41	4	S40 and pressure	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:16
S42	4	S40 and S38 and S37	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:42
S43	6	frequenc\$3 and S36	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:44
S44	1	Hz and S36	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/09 18:44
S45	4	radio adj frequenc\$3 and S36	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:05
S46	162	spark adj gap and human near body	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:05

## EAST Search History

S47	24	spark adj gap and human near body same (volt kilovolt kv v)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:13
S48	24	spark adj gap and (human near body hbm) same (volt kilovolt kv v)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:14
S49	9	spark adj gap and (human near body hbm) same (volt kilovolt kv v) and frequency	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:16
S50	2	spark adj gap and (human near body hbm) same (volt kilovolt kv v) and frequency and (printed near circuit near board PCB)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 16:33
S51	22	(US-20020024791-\$ or US-20020151200-\$ or US-20040042141-\$ or US-20040057186-\$ or US-20040141263-\$).did. or (US-4586104-\$ or US-5933307-\$ or US-5969924-\$ or US-6059983-\$ or US-6467414-\$ or US-6493198-\$ or US-6510058-\$ or US-6600642-\$ or US-6628498-\$ or US-6937454-\$ or US-4527215-\$ or US-5315472-\$ or US-6215251-\$ or US-3887848-\$ or US-6241537-\$).did. or (US-3321390-\$ or US-2666908-\$).did.	US-PGPUB ; USPAT; USOCR	OR	ON	2005/12/10 11:22
S52	8	S51 and inch\$3	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:32

## EAST Search History

S53	1	spark adj gap same printed adj board	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:33
S54	169	spark adj gap same trace	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:33
S55	7	spark adj gap same trace same laser	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:35
S56	1743	spark adj gap same cycle	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:36
S57	63	spark adj gap same cycle near discharge	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:36
S58	1	spark adj gap same cycle near discharge same (printed near board trace)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:37
S59	302	spark adj gap same discharge same multiple	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 11:38
S60	278	spark adj gap same discharge same multiple	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:42

## EAST Search History

S61	5	spark adj gap same discharge same multiple same evaporat\$4	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:43
S62	5	spark adj gap same multiple same evaporat\$4	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:43
S63	1294	discharge same multiple same evaporat\$4	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:43
S64	7	discharge same multiple same evaporat\$4 near4 electrod\$3	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:45
S65	375	discharge same repeat\$3 same spark adj gap	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:46
S66	132	discharge with repeat\$3 same spark adj gap	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 11:46
S67	10	discharge with repeat\$3 same spark adj gap same air near gap	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:09
S68	909	spark adj gap same life	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:09
S69	152	spark adj gap same life same maxim\$5	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:10
S70	10	spark adj gap same life near3 maxim\$5	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:12
S71	0	spark adj gap same life near3 degrad\$6	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:12

## EAST Search History

S72	4	spark adj gap same life same degrad\$6	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:14
S73	2	S51 and life	USPAT; USOCR; EPO; JPO; IBM_TDB	OR	ON	2005/12/10 12:14
S74	24	spark adj gap and (human near body hbm) same (volt kilovolt kv v)	US-PGPUB ; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/10 16:34